

The *Final 2001 Comprehensive Solid Waste Management Plan* presents King County's strategy for managing the solid waste system's garbage and recycling services over the next 20 years. It will guide us through a time of many significant changes – including closure of the last active landfill in King County.

The area that this Plan covers includes all of King County's incorporated and unincorporated areas, except for the City of Seattle, which has its own solid waste system, and Milton, which is part of Pierce County's system.

In mapping out a plan for the solid waste system, several fundamental objectives emerged:

- Keep pace with the region's population and economic growth
- Continue to provide the vital services that residents have come to expect
- Monitor industry changes and advances to keep the system as efficient and effective as possible
- Continue to be a steward of the environment and a leader in resource conservation
- Control system costs and continue to keep disposal rates stable and low

These fundamental objectives underlie the planning for each facet of the regional solid waste system – from promotion of waste reduction and recycling to transfer station improvements to planning for long-term disposal. The common theme running through the Plan is to build upon the system's existing infrastructure and past successes to shape our future.

This final 2001 Plan is the culmination of a system-wide planning effort. The recommendations presented throughout its pages were developed with input from local government leaders, private industry representatives, and King County citizens. The County will continue to work closely with these planning participants as the recommendations in this Plan are implemented and the region's future unfolds.

Guide to the Plan

The purpose of a Comprehensive Solid Waste Management Plan is to provide the overarching goals and policies that will guide solid waste and recycling programs and



The Plan presents
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services in the system. While it presents a framework for the future, it is not intended to be a work plan for specific policies, rates, programs, or capital improvements. Implementation of specific recommendations will be accomplished through the County and cities' annual work plan processes.

This 2001 Plan is organized to guide the reader through the planning process from demographic forecasting to the assessment of garbage disposal fees. Chapter 2 sets the stage for the reader by providing a brief look at the history of solid waste management in the county, the process for developing the Plan, and the governing policies for the solid waste management system. Chapter 3 looks at projected population and employment growth and how that

growth and other factors are used to develop waste generation, recycling, and disposal forecasts. Chapters 4 through 10 discuss the various facets of the solid waste system, including:

- Chapter 4 Waste Reduction, Recycling, and Market Development
- Chapter 5 Collection of Recyclables and Mixed Municipal Solid Waste (MMSW or Garbage)
- Chapter 6 The Regional Transfer System
- Chapter 7 Disposal of MMSW
- Chapter 8 Construction, Demolition, and Landclearing Debris (CDL), and Special Wastes
- Chapter 9 Enforcement
- Chapter 10 Solid Waste System Financing and Rates

These chapters present the background, governing policies and current issues associated with each element of the system, followed by recommendations for the 20-year planning period. The recommendations might propose specific actions, suggest a continuation of current practice, or identify the need for further dialogue or additional studies. For ease of locating recommendations within each chapter, they are noted with the symbol to the right. A brief summary of the key recommendations from each chapter is presented below.

Chapter 4 – Waste Reduction, Recycling, and Market Development

With the increases in population and employment projected for King County in the upcoming years, it is critical to continue our focus on waste reduction and recycling as the highest priorities for managing solid waste. The recommendations in Chapter 4 build on existing waste reduction and recycling programs by expanding educational and technical assistance in our communities, businesses, and schools, and developing strong partnerships with cities and public agencies to coordinate our mutual efforts in this area.

The Plan describes measurable goals and targets for our waste reduction and recycling efforts. It also reaffirms the policy that waste reduction and recycling programs must be cost effective as well as aggressive.

One element of the Plan's recommendation is to expand recycling and reuse opportunities at the County's transfer stations and pursue other venues for collection, such as special community events. In addition, more commodities are being looked at for their recycling potential in the marketplace, such as certain plastics, textiles, construction debris, food wastes, and others. Regional markets and technologies are routinely studied to assess the market potential for an array of recycled and reused products. The County will continue to work with the cities, regional agencies and organizations, and area residents, businesses, and manufacturers to pursue sustainable markets to support our waste reduction and recycling goals.

Some of the newer programs slated for more attention include increased recycling and reuse of organic materials, such as yard wastes and agricultural wastes; product stewardship among consumers, businesses, and manufacturers; and promotion of "green" or sustainable building principles throughout our communities.

Chapter 5 – Collection of Recyclables and Mixed Municipal Solid Waste

Nearly all of the residents in King County subscribe to curbside collection services for garbage and recyclables. One recommendation in Chapter 5 is to research the costs and benefits of combining curbside recyclables (except for glass) into a single bin for collection and adding new materials for pick-up, such as polycoated papers, juice boxes and similar containers, textiles, and more plastics. These changes were recently made by the City of Seattle's solid waste system.

Other recommendations in the chapter focus on providing collection opportunities that reduce the need for customers to bring wastes to the transfer stations in their own vehicles, thereby reducing traffic and congestion at the stations. One reason customers typically give for bringing material to the transfer stations is that they have bulky or extra items that could not be put out at the curb, such as debris from a household cleaning or remodeling project. To develop alternative ways for residents to dispose of bulky and extra items, the County will work with the cities to coordinate more special collection events and with the private collection companies to examine the feasibility of establishing efficient and economical pick-up services.

The County will also be studying the possibility of establishing a stationary collection site for household hazardous waste at a transfer station. This service would augment collection provided by the County's Wastemobile, which travels throughout the county to collect these types of wastes.

Chapter 6 - The Regional Transfer System

The current transfer system is a mix of public and private facilities, and the Plan recommends that this balance remain the same in the future. The private solid waste handling companies presented several alternatives to increase their role in providing transfer services. After a thorough analysis of the alternatives, no benefit to the ratepayers of King County was identified from further privatization of part or all of the public transfer system.

The County's 1992 Plan called for a major construction program to build a number of new and replacement transfer stations. The 2001 Plan makes the best use of existing facilities and optimizes capital outlay by concentrating investment at "expandable" stations and making repairs and safety and operational improvements at the remaining stations, where there is limited space for expansion. This Plan does recognize that some of the transfer stations are operating very close to capacity, and some new facilities may be necessary, primarily in the northeast part of the county.

When the Cedar Hills Regional Landfill closes in about 2012, the County will make the transition to waste export. To prepare the regional transfer system for export, waste compactors will be installed at County transfer stations. Studies of similar utilities that have made the transition to waste export show that consolidating garbage into compacted loads makes transport considerably more economical. Other upgrades will be

made at the transfer stations to improve traffic flow and queuing and to complete necessary maintenance and repairs at some of the older stations. The County will also be pursuing ways to manage traffic patterns and traffic flow at the transfer stations to better serve the customers.



The County's aggressive waste reduction and recycling efforts in the past have led to a substantial reduction in the amount of garbage that reaches the landfill. In fact, one outcome of these efforts has been to extend the life of the Cedar Hills Regional Landfill by about 8 years. Even so, the landfill is expected to reach its permitted capacity and close in 2012. The Plan recommends that the County fol-

low the path of other local jurisdictions and begin to export wastes to a landfill outside of King County once Cedar Hills closes.

Adoption of this Plan is only the first step in preparing for waste export. There will be extensive public and city involvement in the planning process before export begins. Together, we will develop a new system for disposing of the region's waste by 2012.



The County opened Refuse Area 5 of the Cedar Hills Regional Landfill in 1999

One alternative examined in some detail in the draft and final Plans was whether to begin exporting waste before Cedar Hills is full, in order to extend the life of the land-fill. This idea did not prove to be a cost-effective alternative. There are compelling operational and economic reasons to continue sending all of King County's waste to the landfill until it reaches its permitted capacity and then closing the facility. However, the County will remain open to considering proposals for initiating waste export prior to the 2012 closure of Cedar Hills should circumstances warrant. A transition plan will also be needed as the closure date approaches.

Chapter 8 – Construction, Demolition, and Landclearing Debris (CDL)

Private-sector solid waste management companies currently handle the system's CDL waste and recycling under contract with King County. King County facilities accept only limited quantities of CDL. Contracts with the private companies expire in 2004. Before this date, targeted studies will be conducted to determine how to best handle CDL in the future. The primary goal of any selected plan will be to increase the amount of CDL that is recycled from both commercial work sites and disposal sites.

Chapter 9 – Enforcement

The key recommendation in Chapter 9 is to continue to coordinate system-wide efforts to control litter and illegal dumping. The County and other jurisdictions at the state and local level have established a cooperative effort to tackle the problem. Recommendations in the Plan include continuing with existing programs and task forces, increasing targeted education programs, establishing an illegal dumping hotline, and possibly pursuing legislative remedies to strengthen enforcement.

Chapter 10 – Solid Waste System Financing and Rates

All of the program and service recommendations for the regional transfer and disposal system are designed to strike a balance between system improvements and cost.

There are two primary recommendations in this chapter of the Plan. First, the County plans to provide more technical assistance to the cities. Grants provide critical funding to city programs for waste reduction and recycling, and the County will assist cities in locating and taking advantage of grant opportunities. The County will also serve as a clearinghouse of information about programs, contracts,

and ideas that can be shared among the cities. Also recommended is the formation of a Solid Waste Policy Work Group. The work group is intended to share responsibility for analyzing and developing solid waste policies and rate structures. Proposals developed by the group will go to the King County Executive for consideration in future rate design.



Curbside recycling is available to nearly all of the County's residents

Recommendations formulated in the Plan were developed through extensive research and analyses. Each chapter cites various supporting documents, studies, and technical papers that are provided in the 2000 Comprehensive Solid Waste Management Plan Technical Appendices. These appendices are bound in two volumes under separate cover.

A glossary of important terms and abbreviations is presented following the Plan chapters. The final attachment to this Plan is the *Responsiveness Summaries*, which present the County's response to public comments received on the draft Plan issued in April 2000. The summaries provide a guide on how the Plan incorporates comments from the individuals and groups that participated in developing the Plan.

The Regional Planning Effort

Issuance of this Plan follows a comprehensive planning effort involving all of the key players in the solid waste system. This effort began in the spring of 1999 as the County's Solid Waste Division asked for suggestions and ideas about the future direction of solid waste programs and services. The Division met individually with –

- Elected officials and solid waste coordinators from the 37 cities that are part of the regional system
- Representatives from the private solid waste management companies
- The unincorporated area councils
- The Solid Waste Advisory Committee
- The Regional Policy Committee
- The Utilities and Technology Committee

To be sure that private citizens were heard, the County hosted six public meetings across the county. These meetings were attended by some 250 people who contributed their ideas and expectations about services in the region as well as in their own communities.

From the diverse ideas gathered during this process, the Division prepared the draft Plan, which was issued in April 2000. The draft Plan laid out various alternatives and proposed recommendations for regional services and programs.

The public comment period for the draft Plan extended from May through September 2000. During this period, Division staff again met with all of the key players to introduce the major components of the Plan and the process for providing comments. Meetings were held with the cities both individually and jointly to discuss the Plan contents and process for revision and adoption. Five more public meetings were held around the County.

The final Plan was developed after careful consideration of all the comments received in response to the draft Plan. Those comments are included with the *Responsiveness Summaries* bound in this document. The two *Responsiveness Summaries* show how and where the Executive's 2000 Plan addressed the public and city comments and how they were addressed in this final 2001 Plan adopted by the King County Council.

Process for Adopting and Amending a Final Plan

The final Plan must be adopted by the cities and the King County Council and approved by the Washington Department of Ecology before implementation. The process for development and adoption of the Plan is described in Figure 1-1.

Figure 1-1. Process for Development, Review, and Adoption of the Plan

Draft Plan Development	
May-Oct. 1999	Meetings with the public, cities, solid waste industry, and other groups
Oct. 1999-April 2000	Preparation and issuance of the draft Plan
Dec. 1990-Aug. 2000	Preparation and issuance of the draft Environmental Impact Statement (EIS)
Draft Plan Review and Response	to Comments
April-Sept. 2000	Public review and comment period for draft Plan and for the draft EIS (AugSept.)
	Work with Plan participants
	Briefings for the King County Council's Utilities & Technology Committee and Regional Policy Committee on the draft Plan
Draft Plan and Draft EIS Revision	1
Oct. 2000-Feb. 2001	Additional analysis and revision of draft Plan and EIS based on review of public comments
Consideration of Final Plan and	EIS by King County Council
March 2001	King County Executive releases final 2000 Plan and EIS
March-Oct. 2001	Utilities & Technology and Regional Policy Committee Review of Plan recommendations
Adoption of Final Plan	
Oct. 15, 2001	Adoption of the <i>Final 2001 Comprehensive Solid</i> Waste Management Plan by the King County Council
Oct. 25, 2001	The Regional Policy Committee, acting as Solid Waste Interlocal Forum, recommends that the cities approve the Plan
Dec. 1, 2001-March 31, 2002	The 120-day period for city adoption begins
April 1, 2002	Ecology's 45-day approval period for adopted Plan begins

The ILAs require that adopted solid waste management plans be reviewed, and any necessary revisions proposed, at least once every three years, or more frequently if warranted. Elements to be updated will be assessed to accommodate new needs and opportunities and to make corrections necessary to achieve adopted goals and implement adopted policies.

An amendment process was developed and agreed upon by the cities and the County in 1990. If issues requiring a plan amendment are identified and resolved between the County and the affected city or cities, the parties develop the plan amendment, take formal action to adopt it, and then implement it.

If an issue arises and agreement cannot be reached between the affected jurisdictions, a formal request is made by the County or affected city(ies) to the Regional Policy Committee (replacing the former Solid Waste Interlocal Forum) to consider a plan amendment. If the Regional Policy Committee determines that a plan amendment is necessary, the committee determines which cities are affected by the issue, and reviews and approves the proposed plan amendment. Once approved, the County and all other affected cities would act to adopt the amendment. Ecology would then approve the amendment, and it would be distributed to all cities that are covered by the Plan.